

Appl. No. 10/748,734  
Amdt. Dated February 2, 2007

Attorney Docket No. 88519.0001  
Customer No.: 26021

**Listing of Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

- 1-3. (Canceled)
4. (Previously presented) A transparent electrode comprising:  
a ZnO layer; and  
an Mg-doped ZnO film formed on the ZnO layer,  
wherein the ZnO layer is formed on a semiconductor layer, and  
wherein the semiconductor layer comprises a GaN system semiconductor layer.
5. (Previously presented) A transparent electrode comprising:  
a ZnO layer; and  
an Mg-doped ZnO film formed on the ZnO layer,  
wherein the ZnO layer is formed on a semiconductor layer, and  
wherein the semiconductor layer comprises an n-type GaN system semiconductor layer formed on a substrate, an emission layer formed on the n-type GaN system semiconductor layer, and a p-type GaN system semiconductor layer formed on the emission layer.
6. (Previously presented) The transparent electrode of Claim 4, wherein the Mg-doped ZnO film overlies an upper surface of the ZnO layer.
7. (Canceled)

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8. (Previously presented) The transparent electrode of Claim 4, wherein a first metal pattern is formed on the Mg-doped ZnO film.

9. (Previously presented) The transparent electrode of Claim 4, wherein a second metal pattern is formed on the semiconductor layer.

10. (Previously presented) The transparent electrode of Claim 4, wherein the Mg-doped ZnO film improves acid resistance of the transparent electrode.

11. (Previously presented) The transparent electrode of Claim 4, wherein the semiconductor layer is formed on a substrate.

12. (Canceled)

13. (Previously presented) A light emitting device comprising:

a semiconductor layer formed on a substrate;

a ZnO transparent electrode formed on the semiconductor layer; and

an Mg-doped ZnO film formed on the ZnO transparent electrode,

wherein the semiconductor layer comprises a GaN system semiconductor layer.

14. (Previously presented) A light emitting device comprising:

a semiconductor layer formed on a substrate;

a ZnO transparent electrode formed on the semiconductor layer; and

an Mg-doped ZnO film formed on the ZnO transparent electrode,

wherein the semiconductor layer comprises an n-type GaN system semiconductor layer formed on the substrate, an emission layer formed on the n-type GaN system semiconductor layer, and a p-type GaN system semiconductor layer formed on the emission layer.

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15. (Previously presented) The light emitting device of Claim 13, wherein the Mg-doped ZnO film overlies an upper surface of the ZnO transparent electrode formed on the semiconductor layer.

16. (Canceled)

17. (Previously presented) The light emitting device of Claim 13, wherein a first metal pattern is formed on the Mg-doped ZnO film.

18. (Previously presented) The light emitting device of Claim 13, wherein a second metal pattern is formed on the semiconductor layer.

19. (Previously presented) The light emitting device of Claim 13, wherein the Mg-doped ZnO film improves acid resistance of the light emitting device.

20-25. (Canceled)